Ohio Grade 7

## LineUp With Math<sup>TM</sup> Alignment Academic Content Standards - Mathematics Grade-Level Indicators

| Measurement Standard   |   |  |
|--|---|--|
| Measurement Units  |   |  |
| Grade-Level Indicator  | LineUp With Math <sup>™</sup> Activities  |  |
| 1. Select appropriate units for measuring derived measurements; e.g., miles per hour, revolutions per minute.  | Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.   |  |
| Use Measurement Techniques and Tools   |   |  |
| Grade-Level Indicator  | LineUp With Math <sup>™</sup> Activities  |  |
| 4. Solve problems involving proportional relationships and scale factors; e.g., scale models that require unit conversions within the same measurement system.                   | Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control. |  |
| 5. Analyze problem situations involving measurement concepts, select appropriate strategies, and use an organized approach to solve narrative and increasingly complex problems. | Choose and apply a variety of strategies to optimize the solution of air traffic control conflicts.   |  |

| Patterns, Functions and Algebra Standard  Analyze Change  |   |
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|   |   |
| 10. Analyze linear and simple nonlinear relationships to explain how a change in one variable results in the change of another. | Use an interactive simulator to identify distance, rate, time conflicts in air traffic control problems and resolve the conflicts by varying plane speeds or changing plane routes. |
| 11. Use graphing calculators or computers to analyze change; e.g., distance-time relationships.                                 | Use an interactive simulator to identify distance, rate, time conflicts in air traffic control problems and resolve the conflicts by varying plane speeds or changing plane routes. |